

ITHOSTYGNUS (METOPHTHALMUS) SERRIPENNIS BROUN
(COL.: LATRIDIIDAE) FROM A LIVING BAT

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ON 15 MARCH 1998, Mr and Mrs Nadin, the owners of a cottage in Routh, Humberside, found an injured bat lying on a gravel path in their garden. The bat, a specimen of the Common Pipistrelle *Pipistrellus pipistrellus*, was placed in a clean cardboard box lined with kitchen roll and brought the day it was found to ACL who noted small puncture wounds in a wing, together with a slightly inflated abdomen, features consistent with injury by a domestic cat. The bat was started on a course of an antibiotic and housed in a small plastic vivarium where it accepted a mealworm-based diet and water.

On the day after it was brought in, ACL carried out a routine examination of the bat for ectoparasites, putting the three specimens found into a tube. Thinking that they were fleas, he sent the tube to RSG who noticed, on close examination, that they were in fact small beetles. The latter were sent to JAO who identified them as examples of *L. serripennis*.

L. serripennis is a native of New Zealand, first found in Britain in a cellar in Reigate, Surrey (Stott, 1928). Since then, it has been found in many locations throughout the British Isles. It has been recorded from four sites in Humberside (Bob Marsh, pers. comm.), of which the nearest to Routh is Elstronwick, only 11 kilometres distant. Most of the sites where the beetle has occurred, have been synanthropic situations, usually the site of mould infection, but they have included a house sparrow's nest and wasps' nests (Halstead, 1959). It has been recorded out of doors, but such occurrences have practically all been in, or near, man-made structures such as in a dove-cote (Welch, 1985) or in a large heap of cut grass (Owen *et al.*, 1997). Less explicit synanthropic habitats include grass tufts (Luff, 1965) and moss on a mountain (Luff, 1985) but both sites were quite close to buildings (Luff, pers. comm.). To the best of our knowledge, this is the first record of the beetle being associated with any mammal. Conversely, beetles are not held to have an association with live bats other, that is, than as dietary components (Hill & Smith, 1984).

The precise origin of the three specimens in this case is uncertain. Though contamination of entomological field collections with stray specimens is not entirely unknown, we have no good reason to believe that the specimens were not on the bat when it was found on the garden path. No other examples of the beetle were seen before, or have turned up since, in the room where injured bats were kept. ACL has been a bat-carer since 1994 and has never observed any small beetles associated with the mealworm-based diet.

We can only speculate, however, on whether the beetles were acquired by the bat before it reached the garden or afterwards. Published records cited above indicate

that the beetle occurs in a considerable variety of microhabitats, compatible with it breeding in or near the garden where the bat was found. If the animal was caught by a cat, as was suggested by its wounds, the bat might have picked up the beetles in the course of the cat playing with it.

Probably the most interesting possibility to be considered is that of the bat acquiring the beetles in its roost. This is presumably where bats usually acquire their fleas. Bat guano and other debris in the roost, such as might also occur in a dovecote, could provide conditions permitting the beetle to breed. In the roost, the beetles would probably meet up with the bat by chance. It is unlikely that the species has an in-built affinity for bats, for it lacks the specially morphology (usually of legs or tarsi) found in bat ectoparasites (fleas, bat flies, bed bugs, mites) giving them a secure hold on bats while they are flying. Moreover, these ectoparasites live on bat blood whereas the beetle and its relatives are mould feeders. Nevertheless, a limited ability of the beetle to hang on must exist if this is how the beetle reached the garden where it was found. Looking for the beetle in bat roosts might be a useful first approach in seeking support for this possibility (though readers are reminded that in view of the protected status of bats it would be necessary to obtain a licence before any such visit takes place).

We must thank Mr & Mrs Nadin, for rescuing the bat and bringing it to ACL and Bob Marsh for information on the occurrence of *L. serripennis* in Humberside.

References

- Halstead, D. G. M., 1959. The status of *Metophtalmus serripennis* (Broun) (Col.: Lathridiidae) in Britain. *Entomologist's mon. Mag.* **95**: 100.
- Hill, J. E. & Smith, J. D., 1984. Bats: A natural history. British Museum (Natural History), London.
- Luff, M. L., 1965. A list of Coleoptera occurring in grass tussocks. *Entomologist's mon. Mag.* **101**: 240-245.
- , 1987. Additions and some corrections to the Coleoptera of the Isle of Man. *Entomologist's mon. Mag.* **123**: 219-221.
- Owen, J. A., Allen, A. J. W., Booth, R. G. & Luff, M. L., 1997. Beetles from a large grass-compost heap on Epsom Downs, Surrey studied over three years. *Entomologist's Gaz.* **48**: 111-124.
- Stott, C. E. 1928. The occurrence of *Lithostygnus serripennis* Broun a New Zealand beetle at Reigate *Entomologist's mon. Mag.* **64**: 140.
- Welch, R. C., 1985. Coleoptera from a dovecote at Fellbrigg Hall, Norfolk. *Entomologist's mon. Mag.* **121**: 34.

BRIAN BAKER

We were saddened to hear of the sudden and unexpected death of Brian Baker earlier this year. Brian was for many years at the Reading Museum and was a well known figure in entomological circles. He was President of the British Entomological and Natural History Society for 1983, but was perhaps best known for his expert knowledge of the clearwing moths (Sesiidae), contributing the chapter on this family to *The moths and butterflies of Great Britain and Ireland* (Harley).